## Rooted and Floating Macrophyte Review Outline 05-21-2014 Draft

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## Questions to address in the review:

- 1. What are the general conceptual models of rooted or floating aquatic vegetation in relation to both impacts to and support of beneficial uses?
- 2. What is known about the spatial and temporal trends in floating and rooted aquatic vegetation in the Delta?
- 3. What is the relative importance of nutrients and organic matter accumulation versus other factors in promoting observed trends in floating and rooted aquatic vegetation in the Delta?
- 4. What are the key data gaps and recommended future studies?

## **Review Outline**

- 1. Executive Summary
- 2. Introduction, Purpose of Review, and Key Questions
- 3. General Ecology and Trends in the Distribution of Floating and Rooted Aquatic Vegetation in the Delta
  - a. Definitions
  - b. Overview of genus/species found in the Delta
  - c. Habitat types in which they are characteristically found
  - d. Spatial and Temporal trends in their distribution and abundance
- 4. Conceptual models of linkage with beneficial uses (if there is a problem—what is it?)
  - a. General conceptual model
    - i. Organic matter subsidy/accumulation
    - ii. Limitation of phytoplankton and native SAV
    - iii. Trophic support
    - iv. Habitat alteration
    - v. Navigation and industry
    - vi. Aesthetics
  - b. Documentation of adverse effects in the Delta
- 5. Factors contributing to spread of floating and rooted aquatic vegetation in the San Francisco Estuary-Delta region
  - a. Conceptual models of growth, propagation and environmental characteristics that enhance or limit growth
  - Relative importance of nutrient subsidies versus other factors in promoting observed trends
- 6. Summary of key data gaps and research needs